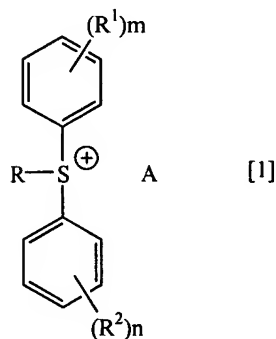


### Amendments to the Claims:

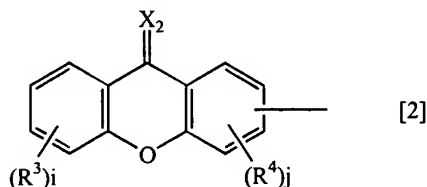
This listing of claims will replace all prior versions and listings of claims in the application.

### Listing of Claims:

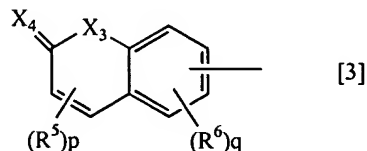
1. (Currently Amended) A heterocycle-containing onium salt shown by the general formula [1] or [35]:



[wherein R is a group shown by the general formula [2]:

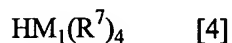


(wherein  $R^3$  and  $R^4$  are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower alkyl group having 1 to 6 carbon atoms as a substituent;  $X_2$  is an oxygen atom or a sulfur atom; i is an integer of 0 to 4; and j is an integer of 0 to 3), or a group shown by the general formula [3]:

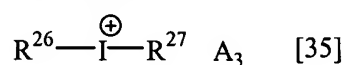


(wherein  $R^5$  and  $R^6$  are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower alkyl group having 1 to 6 carbon atoms as a substituent;  $X_3$  and  $X_4$  are each independently an oxygen atom or a sulfur atom; p is an integer of 0 to 2; and q is an integer of 0

to 3);  $R^1$  and  $R^2$  are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or ~~a lower~~ an alkyl group having 1 to 6 carbon atoms as a substituent; m and n are each independently an integer of 0 to 5; and A is a halogen atom or an anion derived from an inorganic strong acid, an organic acid or a compound shown by the general formula [4]:



(wherein  $M_1$  is a boron atom or a gallium atom; and  $R^7$  is an aryl group which may have a substituent selected from a ~~lower~~ haloalkyl group having 1 to 6 carbon atoms, a halogen atom, a nitro group and a cyano group)],

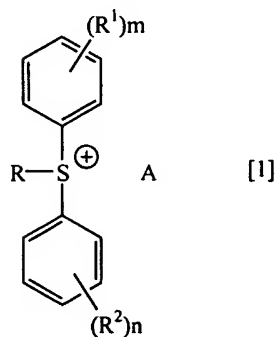


[wherein  $R^{26}$  and  $R^{27}$  are each independently an aryl group which may have a halogen atom or a ~~lower~~ an alkyl group having 1 to 6 carbon atoms as a substituent, a group shown by the above-mentioned general formula [2], or a group shown by the above-mentioned general formula [3];  $A_3$  is a halogen atom or an anion derived from an inorganic strong acid, an organic acid or a compound shown by the general formula [4]; and provided that at least one of  $R^{26}$  and  $R^{27}$  is a group shown by the above-mentioned general formula [2] or [3], and when only one of  $R^{26}$  and  $R^{27}$  is a group shown by the above-mentioned general formula [2] or [3],  $A_3$  is an anion derived from an inorganic strong acid shown by the general formula [36];

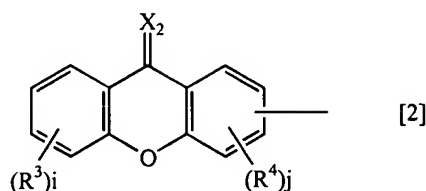


(wherein  $M_3$  is a phosphorus atom, an arsenic atom or an antimony atom), an organic acid or a compound shown by the general formula [4] ].

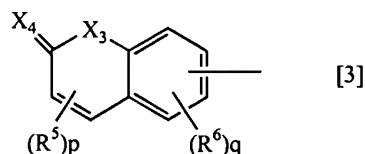
2. (Currently Amended) An onium salt according to claim 1, wherein the heterocycle-containing onium salt is one shown by the general formula [1]:



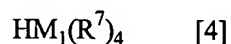
[wherein R is a group shown by the general formula [2]:



(wherein R<sup>3</sup> and R<sup>4</sup> are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent; X<sub>2</sub> is an oxygen atom or a sulfur atom; i is an integer of 0 to 4; and j is an integer of 0 to 3), or a group shown by the general formula [3]:

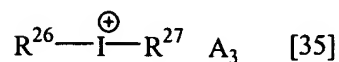


(wherein R<sup>5</sup> and R<sup>6</sup> are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or an alkyl group having 1 to 6 carbon atoms as a substituent; X<sub>3</sub> and X<sub>4</sub> are each independently an oxygen atom or a sulfur atom; p is an integer of 0 to 2; and q is an integer of 0 to 3); R<sup>1</sup> and R<sup>2</sup> are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or an alkyl group having 1 to 6 carbon atoms as a substituent; m and n are each independently an integer of 0 to 5; and A is a halogen atom or an anion derived from an inorganic strong acid, an organic acid or a compound shown by the general formula [4]:

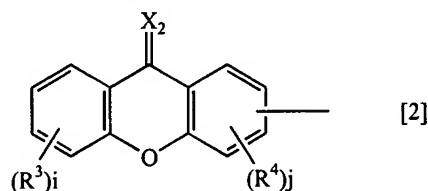


(wherein M<sub>1</sub> is a boron atom or a gallium atom; and R<sup>7</sup> is an aryl group which may have a substituent selected from a haloalkyl group having 1 to 6 carbon atoms, a halogen atom, a nitro group and a cyano group)).

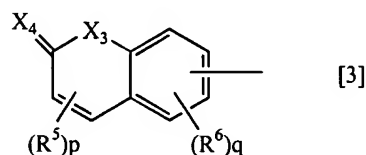
3. (Currently Amended) An onium salt according to claim 1, wherein the heterocycle-containing onium salt is one shown by the general formula [35]:



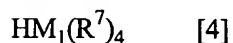
[wherein  $R^{26}$  and  $R^{27}$  are each independently an aryl group which may have a halogen atom or a ~~lower~~ an alkyl group having 1 to 6 carbon atoms as a substituent, a group shown by the general formula [2];



(wherein  $R^3$  and  $R^4$  are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a ~~lower~~ an alkyl group having 1 to 6 carbon atoms as a substituent;  $X_2$  is an oxygen atom or a sulfur atom;  $i$  is an integer of 0 to 4; and  $j$  is an integer of 0 to 3), or a group shown by the general formula [3]:



(wherein  $R^5$  and  $R^6$  are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a ~~lower~~ an alkyl group having 1 to 6 carbon atoms as a substituent;  $X_3$  and  $X_4$  are each independently an oxygen atom or a sulfur atom;  $p$  is an integer of 0 to 2; and  $q$  is an integer of 0 to 3);  $A_3$  is a halogen atom, or an anion derived from an inorganic strong acid, an organic acid or a compound shown by the general formula [4]:



(wherein  $M_1$  is a boron atom or a gallium atom; and  $R^7$  is an aryl group which may have a substituent selected from a ~~lower~~ haloalkyl group having 1 to 6 carbon atoms, a halogen atom, a nitro group and a cyano group); and provided that at least one of  $R^{26}$  and  $R^{27}$  is a group shown by the above-mentioned general formula [2] or [3], and when only one of  $R^{26}$  and  $R^{27}$  is a group shown by the above-mentioned general formula [2] or [3],  $A_3$  is an anion derived from an inorganic strong acid shown by the general formula [36]:



(wherein  $M_3$  is a phosphorous atom, an arsenic atom or an antimony atom), an organic acid, or a compound shown by the general formula [4] ).

4. (Original) A salt according to claim 2, wherein the anion derived from an inorganic strong acid, shown by A is one derived from nitric acid, sulfuric acid, halosulfuric acid, perhalogenic acid or a compound shown by the general formula [5]:



(wherein  $\text{M}_2$  is a metalloid atom or a metal atom; and  $k$  is an integer of 4 or 6).

5. (Original) A salt according to claim 4, wherein the metalloid atom shown by  $\text{M}_2$  is a boron atom, a silicon atom, a phosphorus atom, an arsenic atom or an antimony atom; and the metal atom shown by  $\text{M}_2$  is an aluminum atom, a titanium atom, an iron atom, a nickel atom, a zirconium atom or a gallium atom.

6. (Original) A salt according to claim 2, wherein the anion derived from the organic acid shown by A is one derived from a sulfonic acid shown by the general formula [6]:



(wherein  $\text{R}^8$  is an alkyl group, an aryl group or an aralkyl group, which may have a halogen atom), or a carboxylic acid shown by the general formula [7]:



(wherein  $\text{R}^9$  is an alkyl group, an aryl group or an aralkyl group, which may have a halogen atom).

7. (Original) A salt according to claim 2, wherein R is a group shown by the general formula [2].

8. (Original) A salt according to claim 7, wherein  $\text{X}_2$  in the general formula [2] is an oxygen atom.

9. (Original) A salt according to claim 7, wherein the group shown by the general formula [2] is a xanthonyl group.

10. (Original) A salt according to claim 2, wherein R is a group shown by the general formula [3].

11. (Original) A salt according to claim 10, wherein each X<sub>3</sub> and X<sub>4</sub> in the general formula [3] is an oxygen atom.

12. (Original) A salt according to claim 10, wherein the group shown by the general formula [3] is a coumarinyl group.

13. (Original) A salt according to claim 2, wherein the sulfonium salt shown by the general formula [1] is diphenyl(xanthene-9-one-2-yl)sulfonium hexafluorophosphate or (coumarin-7-yl)diphenylsulfonium hexafluorophosphate.

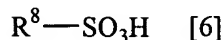
14. (Original) A salt according to claim 3, wherein the anion derived from the inorganic strong acid shown by A<sub>3</sub> is one derived from nitric acid, sulfuric acid, halosulfuric acid, perhalogenic acid or an inorganic strong acid shown by the general formula [5]:



(wherein M<sub>2</sub> is a metalloid atom or a metal atom; and k is an integer of 4 or 6).

15. (Original) A salt according to claim 14, wherein the metalloid atom shown by M<sub>2</sub> is a boron atom, a silicon atom, a phosphorus atom, an arsenic atom or an antimony atom; and the metal atom shown by M<sub>2</sub> is an aluminum atom, a titanium atom, an iron atom, a nickel atom, a zirconium atom or a gallium atom.

16. (Original) A salt according to claim 3, wherein the anion derived from the organic acid shown by A<sub>3</sub> is one derived from a sulfonic acid shown by the general formula [6]:



(wherein R<sup>8</sup> is an alkyl group, an aryl group or an aralkyl group, which may have a halogen atom), or a carboxylic acid shown by the general formula [7]:



(wherein R<sup>9</sup> is an alkyl group, an aryl group or an aralkyl group, which may have a halogen atom).

17. (Original) A salt according to claim 3, wherein each R<sup>26</sup> and R<sup>27</sup> is a group shown by the general formula [2].

18. (Original) A salt according to claim 17, wherein X<sub>2</sub> in the general formula [2] is an oxygen atom.

19. (Original) A salt according to claim 17, wherein the group shown by the general formula [2] is a xanthonyl group.

20. (Original) A salt according to claim 3, wherein each R<sup>26</sup> and R<sup>27</sup> is a group shown by the general formula [3].

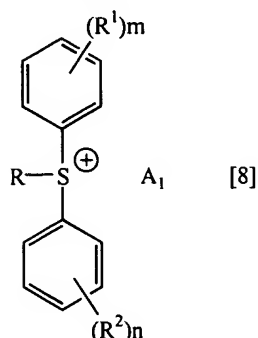
21. (Original) A salt according to claim 20, wherein each X<sub>3</sub> and X<sub>4</sub> in the general formula [3] is an oxygen atom.

22. (Original) A salt according to claim 20, wherein the group shown by the general formula [3] is a coumarinyl group.

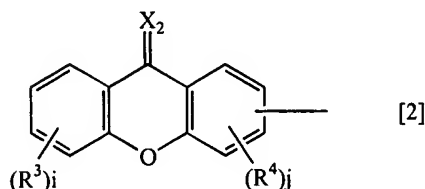
23. (Original) A salt according to claim 3, wherein the iodonium salt shown by the general formula [35] is bis(xanthene-9-one-2-yl)iodonium hexafluorophosphate or bis(coumarin-7-yl)iodonium hexafluorophosphate.

24. (Currently Amended)

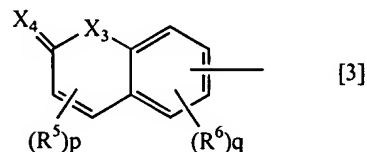
A cationic photopolymerization initiator comprising a heterocycle-containing onium salt shown by the general formula [8]:



[wherein R is a group shown by the general formula [2]:

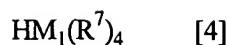


(wherein R<sup>3</sup> and R<sup>4</sup> are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or ~~a lower~~ an alkyl group having 1 to 6 carbon atoms as a substituent; X<sub>2</sub> is an oxygen atom or a sulfur atom; i is an integer of 0 to 4; and j is an integer of 0 to 3), or a group shown by the general formula [3]:



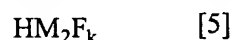
(wherein R<sup>5</sup> and R<sup>6</sup> are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or ~~a lower~~ an alkyl group having 1 to 6 carbon atoms as a substituent; X<sub>3</sub> and X<sub>4</sub> are each independently an oxygen atom or a sulfur atom; p is an integer of 0 to 2; and q is an integer of 0 to 3); R<sup>1</sup> and R<sup>2</sup> are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or ~~a lower~~ an alkyl group having 1 to 6 carbon atoms as a substituent; m and n are each independently an integer of 0 to 5; and A<sub>1</sub> is an anion derived from an inorganic strong acid, a sulfonic acid or a compound shown by the general formula [4]:





(wherein  $\text{M}_1$  is a boron atom or a gallium atom;  $\text{R}^7$  is an aryl group which may have a substituent selected from a ~~lower~~ haloalkyl group having 1 to 6 carbon atoms, a halogen atom, a nitro group and a cyano group)].

25. (Original) A polymerization initiator according to claim 24, wherein  $\text{A}_1$  is an anion derived from the compound shown by the general formula [4] or an inorganic strong acid shown by the general formula [5]:

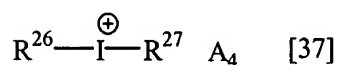


(wherein  $\text{M}_2$  is a metalloid atom or a metal atom; and  $k$  is an integer of 4 or 6).

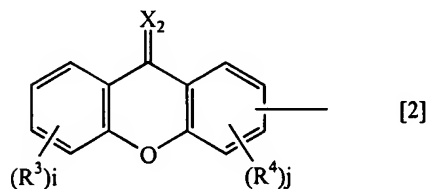
26. (Original) A polymerization initiator according to claim 24, wherein the sulfonium salt shown by the general formula [8] is diphenyl(xanthene-9-one-2-yl)sulfonium hexafluorophosphate or (coumarin-7-yl)diphenylsulfonium hexafluorophosphate.

27. (Currently Amended)

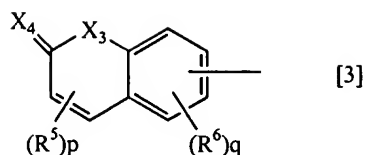
A cationic photopolymerization initiator comprising a heterocycle-containing iodonium salt shown by the general formula [37]:



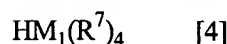
[wherein  $\text{R}^{26}$  and  $\text{R}^{27}$  are each independently an aryl group which may have a halogen atom or a ~~lower an~~ alkyl group having 1 to 6 carbon atoms as a substituent, a group shown by the general formula [2]:



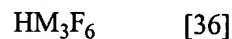
(wherein  $\text{R}^3$  and  $\text{R}^4$  are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a ~~lower an~~ alkyl group having 1 to 6 carbon atoms as a substituent;  $\text{X}_2$  is an oxygen atom or a sulfur atom;  $i$  is an integer of 0 to 4; and  $j$  is an integer of 0 to 3), or a group shown by the general formula [3]:



(wherein  $R^5$  and  $R^6$  are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent;  $X_3$  and  $X_4$  are each independently an oxygen atom or a sulfur atom;  $p$  is an integer of 0 to 2; and  $q$  is an integer of 0 to 3); and  $A_4$  is an anion derived from an inorganic strong acid, a sulfonic acid or a compound shown by the general formula [4]:



(wherein  $M_1$  is a boron atom or a gallium atom;  $R^7$  is an aryl group which may have a substituent selected from a lower haloalkyl group having 1 to 6 carbon atoms, a halogen atom, a nitro group and a cyano group); and provided that at least one of  $R^{26}$  and  $R^{27}$  is a group shown by the above-mentioned general formula [2] or [3], and when only one of  $R^{26}$  and  $R^{27}$  is a group shown by the above-mentioned general formula [2] or [3], an inorganic strong acid is one shown by the general formula [36]:



(wherein  $M_3$  is a phosphorus atom, an arsenic atom or an antimony atom)].

28. (Original) A polymerization initiator according to claim 27, wherein  $A_4$  is an anion derived from the compound shown by the general formula [4] or an inorganic strong acid shown by the general formula [5]:



(wherein  $M_2$  is a metalloid atom or a metal atom; and  $k$  is an integer of 4 or 6).

29. (Original) A polymerization initiator according to claim 27, wherein the iodonium salt shown by the general formula [37] is bis(xanthene-9-one-2-yl)iodonium hexafluorophosphate or bis(coumarin-7-yl)iodonium hexafluorophosphate.

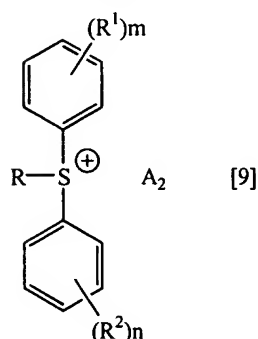
30. (Original) A method for polymerization of an epoxy monomer, which comprises using the polymerization initiator in claim 24.

31. (Original) A method for polymerization of a vinyl ether monomer, which comprises using the polymerization initiator in claim 24.

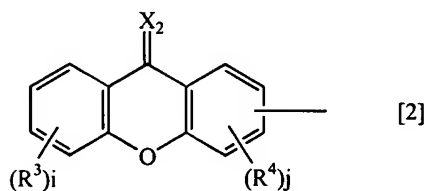
32. (Original) A method for polymerization of an epoxy monomer, which comprises using the polymerization initiator in claim 27.

33. (Original) A method for polymerization of a vinyl ether monomer, which comprises using the polymerization initiator in claim 27.

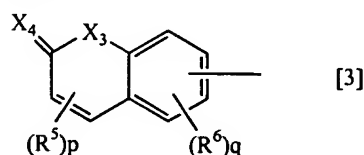
34. (Currently Amended) An acid generator for a resist, comprising a sulfonium salt shown by the general formula [9]:



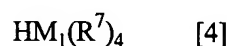
[wherein R is a group shown by the general formula [2]:



(wherein  $R^3$  and  $R^4$  are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower alkyl group having 1 to 6 carbon atoms as a substituent;  $X_2$  is an oxygen atom or a sulfur atom;  $i$  is an integer of 0 to 4; and  $j$  is an integer of 0 to 3), or a group shown by the general formula [3]:



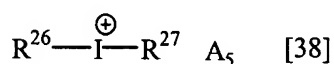
(wherein  $R^5$  and  $R^6$  are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or ~~a lower~~ an alkyl group having 1 to 6 carbon atoms as a substituent;  $X_3$  and  $X_4$  are each independently an oxygen atom or a sulfur atom;  $p$  is an integer of 0 to 2; and  $q$  is an integer of 0 to 3);  $R^1$  and  $R^2$  are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or ~~a lower~~ an alkyl group having 1 to 6 carbon atoms as a substituent;  $m$  and  $n$  are each independently an integer of 0 to 5; and  $A_2$  is an anion derived from an inorganic strong acid, an organic acid or a compound shown by the general formula [4]:



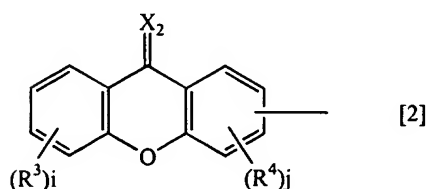
(wherein  $M_1$  is a boron atom or a gallium atom; and  $R^7$  is an aryl group which may have a substituent selected from a ~~lower~~ haloalkyl group having 1 to 6 carbon atoms, a halogen atom, a nitro group and a cyano group)].

35. (Original) An acid generator according to claim 34, wherein the sulfonium salt shown by the general formula [9] is diphenyl(xanthene-9-one-2-yl)sulfonium hexafluorophosphate or (coumarin-7-yl)diphenylsulfonium hexafluorophosphate.

36. (Currently Amended) An acid generator for a resist, comprising an iodonium salt shown by the general formula [38]:

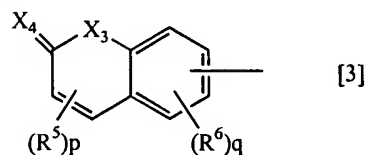


[wherein  $R^{26}$  and  $R^{27}$  are each independently an aryl group which may have a halogen atom or a ~~lower~~ an alkyl group having 1 to 6 carbon atoms as a substituent, a group shown by the general formula [2]:

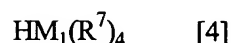


(wherein  $R^3$  and  $R^4$  are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or ~~a lower~~ an alkyl group having 1 to 6 carbon atoms as a substituent;  $X_2$  is an oxygen atom or a

sulfur atom; i is an integer of 0 to 4; and j is an integer of 0 to 3), or a group shown by the general formula [3]:



(wherein  $R^5$  and  $R^6$  are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower alkyl group having 1 to 6 carbon atoms as a substituent;  $X_3$  and  $X_4$  are each independently an oxygen atom or a sulfur atom; p is an integer of 0 to 2; and q is an integer of 0 to 3); and  $A_5$  is an anion derived from an inorganic strong acid, an organic acid or a compound shown by the general formula [4]:



(wherein  $M_1$  is a boron atom or a gallium atom; and  $R^7$  is an aryl group which may have a substituent selected from a lower haloalkyl group having 1 to 6 carbon atoms, a halogen atom, a nitro group and a cyano group); and provided that at least one of  $R^{26}$  and  $R^{27}$  is a group shown by the above-mentioned general formula [2] or [3], and when only one of  $R^{26}$  and  $R^{27}$  is a group shown by the above-mentioned general formula [2] or [3], an inorganic strong acid is one shown by the general formula [36]:



(wherein  $M_3$  is a phosphorus atom, an arsenic atom or an antimony atom)].

37. (Original) An acid generator according to claim 36, wherein the iodonium salt shown by the general formula [38] is bis(xanthene-9-one-2-yl)iodonium hexafluorophosphate or bis(coumarin-7-yl)iodonium hexafluorophosphate.